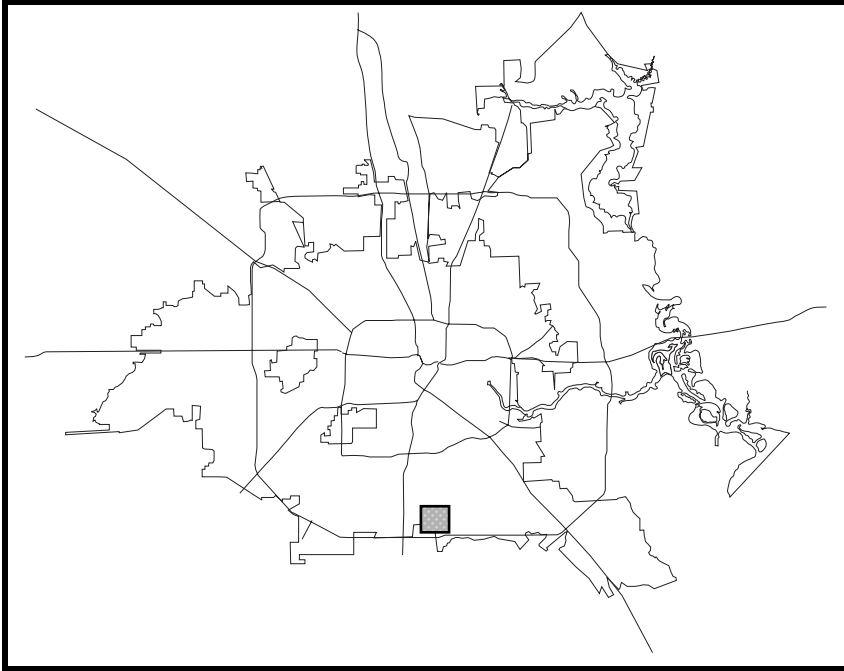


PC ACTION

6. Fuqua – Schumier Connector



APPLICANT: Public Works and Engineering Department

KEY MAP: 574 T

LAMBERT: 5451, 5551

JURISDICTION: City, Harris Co.

PROPOSAL: To realign a portion of Fuqua as a major thoroughfare between Mykawa and Cullen. This realignment will connect Fuqua with Schumier to avoid a number of sand pits that inhibit the straight-line extension of Fuqua. The remaining portion of Fuqua will be downgraded to a major collector status, and the affected portion of Schumier will be reclassified from a major collector to a major thoroughfare.

APPLICANT JUSTIFICATION: The reason for this request is due to several ongoing sand pit operations that impact the direct extension of Fuqua between Cottingham and South Wayside. Evaluation of extending Fuqua as a major thoroughfare through these sand pits sites will dramatically increase the acquisition, design and construction costs of this CIP project scheduled to begin construction in FY07 CIP. Avoidance of these developments is highly desirable. The costs associated with stabilizing fill where sand pits operated add significantly to overall capital improvement cost. Construction practices have to exceed standards further ensuring roadway stabilization throughout the years. Other CIP projects involving Fuqua include construction of overpasses of Mykawa and extension to SH 35 (Telephone Road). This would allow Fuqua to extend from SH 3 all the way west to SH 288 a distance of 10.4 miles. Fuqua and Almeda Genoa will merge at SH 288 to form a single interchange.

To avoid the sand pit locations and not impede traffic flow along Fuqua between Mykawa and SH 288 this proposal calls for dipping a portion of Fuqua south to pick up Schumier right-of-way for some distance and then return back to the existing Fuqua corridor before Cullen Boulevard.

PC ACTION

STAFF RECOMMENDATION: REALIGNMENT of Fuqua between Mykawa and Cullen so that it dips south and align with Schumier through the Mary Kay Street intersection and swing back to the north to realign with Fuqua before Cullen. The remaining portion of Fuqua will be RECLASSIFIED a major collector status, and the affected portion of Schumier will be RECLASSIFIED from a major collector to a major thoroughfare.

PC ACTION: REALIGNMENT of Fuqua between Mykawa and Cullen so that it dips south and align with Schumier through the Mary Kay Street intersection and swing back to the north to realign with Fuqua before Cullen. The remaining portion of Fuqua will be RECLASSIFIED a major collector status, and the affected portion of Schumier will be RECLASSIFIED from a major collector to a major thoroughfare.

JUSTIFICATION: To reasonably complete the existing CIP project that will improve Fuqua from Interstate 45 to SH 288 realignment of this segment of Fuqua is necessary. Existing sand pit operations impact the direct straight-line extension of Fuqua. Costs will escalate to fill and stabilize these pits which are in excess of 40 feet deep.

FACTORS ASSESSED: History, Platting, and Right-of-way

Fuqua first appeared on the City's Major Thoroughfare and Freeway Plan in 1957. It extended as a proposed roadway from US 75 (later known as Interstate 45 South) west to the proposed extension of Post Oak. The planned total distance was to be 15.5 miles. By 1964 the limits of Fuqua had expanded from US 59 on the west to Genoa Red Bluff on the east for a maximum length of 27.10 miles.

Schurmier was added to the MTFP in 1997 as a major collector between Cullen and Mykawa. It's status remains as a four lane 70 foot wide major collector of sufficient width.

PLATTING ACTIVITY

Within the last five years platting activity along this corridor has increased, mostly towards the SH 288 and Mykawa ends. South Meadow Place, along Fuqua at Mykawa and Southridge Crossing, along Schurmier, have begun development since 2004. Both are single family residential developments. South Meadow Place includes 61 acres with an expected build out of 435 lots for a density of 7.0 du/ac. Southridge Crossing covers 136 acres. Section 1 is under development with 113 lots and a density of 2.86 du/ac. Langston Place, platted in 1952, is an existing single family residential development located at the northeast intersection of Wayside and Fuqua. It has 100 acres with 256 lots for a density of 2.56 du/ac.

Autumn Glen, Brunswick Lakes and Brunswick Meadows stretch between Cullen and SH 288. These master planned communities began development in 2003-2004. All are single family residential public street developments. Both Brunswick Lakes and Brunswick Meadows cover more than 300 acres with internal drainage features.

Subdivision Plat Name	Approval Date	Key Map	Land Use	Ac	Lots	Units
Allison Road Subdivision	November 3, 2005	574T	Commercial	2.23	0	0
Almeda Crossing Subdivision	May 11, 2006	574N	SF Residential (public street)	9.79	58	0
Almeda Meadows Subdivision	October 20, 2005	573R	SF Residential (public street)	14.17	94	0
Almeda Meadows Subdivision	May 5, 2005	573R	SF Residential (public street)	14.17	95	0
Almeda Trace Sec 1	February 16, 2006	574P	SF Residential (public street)	14.37	82	0
Almeda Trace Sec 2	February 16, 2006	574P	SF Residential (public street)	3.94	32	0
Andrew Business Center	February 5, 2004	573R	Commercial	8.99	0	0

PC ACTION

Ashlee Manor Subdivision	March 2, 2006	573Q	SF Residential (public street)	0.19	1	0
Autumn Glen Sec 1	July 8, 2004	573Z	SF Residential (public street)	9.03	64	0
Autumn Glen Sec 2	July 8, 2004	573Z	SF Residential (public street)	9.03	6	0
Autumn Glen Sec 3	January 13, 2005	573Z	SF Residential (public street)	11.16	66	0
Autumn Glen Sec 4	July 28, 2005	573Z	SF Residential (public street)	12.43	73	0
Autumn Glen Sec 5	October 6, 2005	573V	SF Residential (public street)	9.31	58	0
Brunswick Lakes Sec 4	May 11, 2006	573Z	SF Residential (public street)	26.79	22	0
Brunswick Lakes Sec 6	September 30, 2004	573U	SF Residential (public street)	29.10	143	0
Brunswick Lakes Sec 9	October 14, 2004	573Y	SF Residential (public street)	24.68	223	0
Brunswick Meadows Sec 13	September 30, 2004	573T	SF Residential (public street)	19.50	101	0
Brunswick Meadows Sec 14		573T	SF Residential (public street)	16.20	96	0
Brunswick Meadows Sec 15	September 30, 2004	573T	SF Residential (public street)	14.60	91	0
Brunswick Meadows Sec 4	October 6, 2005	573Y	SF Residential (public street)	8.46	88	0
Brunswick Meadows Sec 7	October 28, 2004	573T	SF Residential (public street)	16.60	142	0
Brunswick Meadows Sec 9	September 30, 2004	573T	SF Residential (public street)	17.40	95	0
Cullen Missionary Reserve Subdivision	May 27, 2004	573R	Unrestricted	3.13	0	0
Day Break Sec 1	March 2, 2006	574P	SF Residential (public street)	5.87	31	0
E & D Ranch and Trucking Subdivision	February 2, 2006	574Q	SF Residential (public street)	2.41	2	0
Forbes Gardens Subdivision	February 16, 2006	575S	SF Residential (public street)	4.81	4	0
Kennerson Lots at Shamrock Manor	November 17, 2005	573Q	SF Residential (public street)	0.40	2	0
Meggins Estates Subdivision	October 28, 2004	574U	SF Residential (public street)	0.60	4	0
Meggins Estates Subdivision	October 14, 2004	574U	SF Residential (public street)	0.60	4	0
Oil State Country	April 15, 2004	574Q	Commercial	24.98	0	0
Oil State Country replat no 1	August 19, 2004	574Q	Commercial	24.99	0	0
Preston Subdivision	June 16, 2005	574N	Unrestricted	13.08	0	0
Ready-Mix Plaza Subdivision	March 30, 2006	574T	Commercial	4.95	0	0
Schurmier Road Subdivision	November 17, 2005	574T	Commercial	6.91	0	0
South Meadow Place Detention Reserve	January 5, 2006	574U	Other	15.01	0	0
South Meadow Place GP	December 22, 2005	574V	General Plan	61.31	435	0
South Meadow Place Reserves GP	January 5, 2006	574V	General Plan	68.00	0	0
South Meadow Place Sec 1	December 22, 2005	574V	SF Residential (public street)	15.12	102	0
Southridge Crossing GP	September 2, 2004	574Y	SF Residential (public street)	136.46	0	0
Southridge Crossing Sec 1	October 28, 2004	574Y	SF Residential (public street)	39.45	113	0
Swingle Street Subdivision	August 25, 2005	574N	SF Residential (public street)	0.44	3	0
Walker's Estates Subdivision	February 5, 2004	574Q	Unrestricted	2.10	1	0

RIGHT-OF-WAY STATUS

The MTFP calls upon using existing rights-of-way where ever possible, and expanding those ROWs to meet future thoroughfare and collector standards. Much of the Fuqua and Schumier ROWs will be utilized. The connectors between Fuqua and Schumier will have to be newly acquired ROW. These connectors would avoid much of the sand pit operations and provide for more stable soils for major roadway construction.

Street	From	To	Street Type	ROW (ft)	ROW Status
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PC ACTION

Fuqua	SH 288	Furman	Thoroughfare	100	Dedicated / To be Ancquired
Fuqua	Furman	Kier	Thoroughfare	100	To be widened
Fuqua	Kier	Wayside	Thoroughfare	100	To be acquired
Fuqua	Wayside	Mykawa	Thoroughfare	100	To be widened
Schurmier	Cullen	Mykawa	Collector	70	Sufficient width
Almeda Genoa	Furman	Mykawa	Collector	70	To be widened
Cullen	Orem	Beltway 8	Thoroughfare	100	Sufficient width
Cottingham	Orem	Almeda Genoa	Thoroughfare	100	Sufficient width
Cottingham	Almeda Genoa	Beltway 8	Thoroughfare	100	To be widened
Wayside	Orem	Almeda Genoa	Thoroughfare	100	To be acquired
Wayside	Almeda Genoa	Beltway 8	Thoroughfare	100	To be widened

City of Houston, Capital Improvement Plan

Year	Proj No	Street	Description	Amount
FY06	N-0530A	Fuqua Road	Paving South Frwy to Mykawa: Design	420,000
FY07	N-0530A	Fuqua Road	Paving South Frwy to Mykawa: Construction	5,000,000
FY09	N-0530A	Fuqua Road	Paving South Frwy to Mykawa: Construction	2,000,000
FY07	N-0530B	Fuqua Road	Grade Separation at Mykawa: Construction	<u>5,024,000</u>
				12,444,000

Source:

City of Houston, 2006-2010 Capital Improvement Plan

On June 1, 2006 a meeting with PWE and Civil Tech was held to review and discuss the recommendations and issues provided by CivilTech Engineering, Inc. for the construction of improvements along Fuqua Rd. from Cottingham St. to South Wayside Dr., and existing CIP project in the design phase. The existing site conditions observed during the field topographic survey in 2002 were discussed. Several borrow pit excavations were identified and discussed along with several additional private developments along the initial proposed alignment. Civil Tech PER addendum submitted in March 2006 provided alternative alignments, and estimated construction costs to construct a roadway that either crossed the existing borrow pits with a bridge or fill work, or a roadway that bypassed the borrow pits.

The decision was made by agreement of the committee that based on new development and excavation activities, the alignments investigated and proposed are not preferred and will not be used for the proposed project.

It was discussed by the committee to provide an alignment of Fuqua Rd. that provided a transition, beginning west of South Wayside Dr, south to the existing Schurmier Rd. alignment. The proposed improvements would then be constructed along Schurmier Rd. from this transition to Cottingham St. It was also discussed that the City of Houston's MTFP would need to be amended to re-classify Fuqua Rd. as a Major Collector from South Wayside Dr., west to SH 288, and to re-classify Schurmier Rd. as a Major Thoroughfare from South Wayside Dr., west to SH 288.

PC ACTION

SPACING

The thoroughfare and collector street space are standard, roughly one mile spacing. East to west thoroughfares include Schumier, Fuqua, Almeda Genoa and West Airport. North to south thoroughfares are Furman, Scott, Cullen, Cottingham, Martindale (Wayside) and Mykawa.

Street	From	To	Street Type	Direction	Spacing
Fuqua	SH 288	Furman	Thoroughfare	east-west	0.40 mi
Fuqua	Furman	Scott	Thoroughfare	east-west	0.74 mi
Fuqua	Scott	Cullen	Thoroughfare	east-west	0.76 mi
Fuqua	Cullen	Cottingham	Thoroughfare	east-west	0.89 mi
Fuqua	Cottingham	Wayside	Thoroughfare	east-west	1.42 mi
Fuqua	Wayside	Mykawa	Thoroughfare	east-west	0.95 mi
Cullen	W Airport	Orem	Thoroughfare	north-south	1.38 mi
Cullen	Orem	Almeda Genoa	Thoroughfare	north-south	0.74 mi
Cullen	Almeda Genoa	Fuqua	Thoroughfare	north-south	0.32 mi
Cullen	Fuqua	Schurmier	Thoroughfare	north-south	0.31 mi
Cullen	Schurmier	Beltway 8	Thoroughfare	north-south	0.60 mi

MOBILITY

HGAC's Regional Transportation Plan identifies the road construction of Fuqua, between Mykawa and Cottingham as a long term project. Additionally, the road construction of Almeda-Genoa between Mykawa and SH 288 is designated as a short term project (2009-2015). Cullen and West Airport are all designated "Smart Streets."

Street Name	To	From	2005 V	LOS	2025 V	LOS
Fuqua	SH 288	Scott			15840	C
Fuqua	Scott	Cottingham			15823	C
Fuqua	Cottingham	Kier			16141	C
Fuqua	Kier	Wayside			15575	C
Fuqua	Wayside	Foxtan			15918	C
Fuqua	Foxtan	Mykawa			17152	C
Cullen	W Airport	Orem			16534	C
Cullen	Orem	Almeda Genoa			10673	B
Cullen	Almeda Genoa	Fuqua			15205	C
Cullen	Fuqua	Schurmier			14860	C
Cullen	Schurmier	Beltway 8			13308	B

Source.
HGAC, 2025 Regional Traffic
Model.

SAFETY

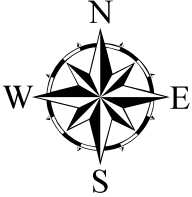
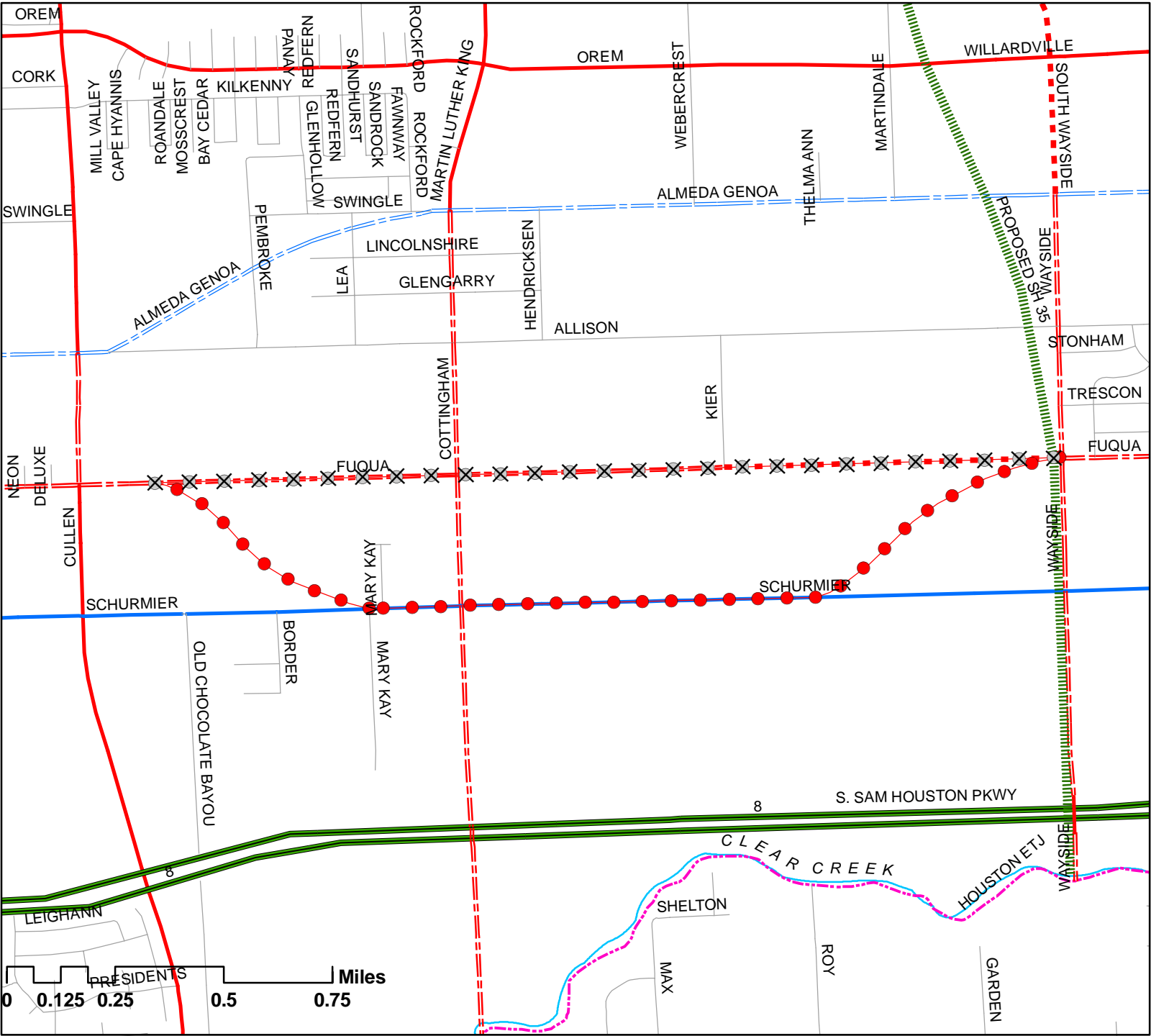
If Fuqua was to be constructed directly across abandoned sandpit sites ground stabilization would be at a tremendous financial cost. Key factors to keep in mind are that the CIP calls for a bridge to be built over Mykawa and the adjacent railroad line. This will allow greater traffic from IH 45 South to run parallel to Beltway 8. A smooth yet financially feasible extension to

PC ACTION

SH 288 must be created. By connecting Fuqua to Schumier and then reconnecting Schumier to Fuqua a smooth uninterrupted flow of traffic will be allowed between IH 45, Mykawy and SH 288.

**FUQUA ROAD
2005 MTFP AMENDMENT**

- Legend**
- Proposed Major Thoroughfare
 - Realign Major Thoroughfare
 - ✕✕✕ Delete Major Thoroughfare
 - Proposed Major Collector
 - Local
 - Proposed Freeway
 - TBW Freeway
 - Sufficient Width Freeway
 - Sufficient Width MTF
 - - - To be Widened MTF
 - · - · - To be acquired MTF
 - Sufficient Width Major Collector
 - - - TBW Major Collector
 - Proposed Major Collector
 - ||||| Proposed Grand Parkway
 - · - · - Houston ETJ
 - WATER



PLANNING & DEVELOPMENT
DEPARTMENT,
CITY OF HOUSTON